

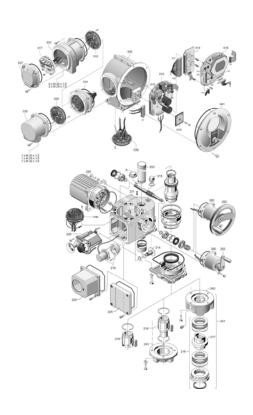




Recommended spare parts and often used accessories

Electric Actuators

- Rotary Actuators 2SA7
- Part-turn Actuators 2SG7





Recommended spare parts

| Base order No. ¹⁾ (2SY7 + part No.) part No. | Short description | Explosion views see attachment | / SS | | Delivery period [weeks] | Spare part definition + detailed description Page |
|---|--------------------------------|--------------------------------|------|---|-------------------------------|---|
| Electronics | | | | | | |
| 001 | Electronics unit | a, b | 5 | 5 | 4 | 3-5 |
| 041 | Electronics housing cover | a, b | 1 | 1 | 2 | 6 |
| Mechanical | | | | | | |
| 218 | Gasket set for commissioning | all depictions | 10 | - | 2 | 7 |
| 219 | non-intrusive position encoder | c, d | 1 | 1 | 2 | 8 |
| 220 | Signaling gear | c, d | 2 | 5 | 2 | 9 |
| 225 | Signaling gear hood | c, d | 5 | 5 | 2 | 10 |
| 250 | Hand manual | c, d, e | 5 | 5 | 4 | 11 |
| 252 | Handle | c, d, e | 5 | 5 | 2 | 12 |

Often used accessories

| Short description | Order No. | Delivery period [weeks] | Detailed description Page |
|---------------------------------------|---------------|-------------------------------|---------------------------|
| COM-SIPOS PC parameterization program | 2SX7100-3PC02 | 1 | 13 |
| Parking socket | 2SX7303-0PS01 | 2 | 13 |
| Separate mounting | 2SX7300 GA | 4 | 14 |

Attachments

(explosion views)

| а | Electronics | • | ECOTRON | - Connections, housings, control electronics | 15 |
|---|-------------|---|--------------------------|--|----|
| b | | • | PROFITRON/HiMod | - Connections, housings, control electronics | 16 |
| С | Mechanical | • | Rotary actuator | - 2SA7 . 1/2/3/4 | 17 |
| d | | | | - 2SA7 . 5/6/7/8 | 18 |
| е | | • | small Part-turn actuator | - 2SG7 | 19 |

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¹⁾ Numbers printed in bold are part Nos. of the explosion views!

Electronics

2SY7001- Electronics unit

Version: Silver-grav

Silver-gray coating (similar RAL7037), completely assembled, including mounting parts for mounting to the

actuator's gear unit, with mounting instruction.
Connection openings are covered for transport/stocks.

(including the parts 010 - 016, 034, 035, 041, 042 and for version with electrical connection "8" the parts 017,

30, 33 and 37 that are used depending on the version)

Notes: - Electronics units are function-tested and are documented with a separate serial number and

order number (2SY7...-) and are specified on a neutral rating plate. A wiring diagram is included.

- Current data such as the number of elapsed hours of the motor cannot be imported from the original

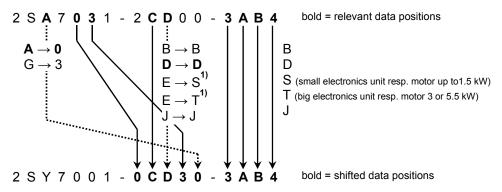
electronics unit. Wherever applicable, maintenance intervals must be reparameterized.

Identical electronics unit:

Determining spare parts with importing of all actuator-specific data by the supplier.

(Electronics unit can only be used for absolutely identical actuator versions, e.g. rotary actuators with 37-125 Nm and 5-40 rpm.)

Example: supplied type





- An identical electronics unit is required if the actuator parameters (COM-SIPOS STE-file) of the old actuator are not available!
- A replacement for a SIPOS 5 electronics unit where the actuator parameters are not available is only possible, if the complete order number of the SIPOS 5 actuator is communicated!

Actuator-neutral electronics unit:

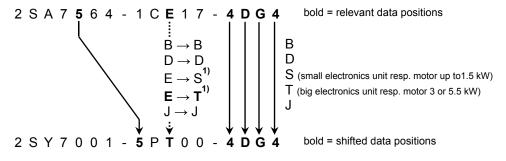
Electronics unit

Electronics unit

Determining spare parts exclusively taking into account the data relevant to the version.

(Electronics unit is largely actuator-neutral. With the PC parameterization program COM-SIPOS, Order No. 2SX7100-3PC02, the actuator parameters like actuator type, torques or forces and speed, positioning time, etc. are downloaded and uploaded to the replacement electronics.)

Example: supplied type





- Higher grade neutral electronics unit (value at the 5th digit of the order number) can also be used for lower grade, e.g. an electronics unit for the 2S.78 (HiMod) can also be used for the actuator types 2S.75, 2S.73 und 2S.70!
- A neutral electronics unit can also be used as replacement for a SIPOS 5 actuator!

| 1) | Version | Actuator types |
|----|---------|---|
| | | 2SA701., 2SA702., 2SA703., 2SA704C, 2SA731., 2SA732., 2SA733., 2SA734C, 2SA751., 2SA752., 2SA753., 2SA754C, 2SA781., 2SA782., 2SA783., 2SA784C, 2SG7 |
| | | 2SA704D, 2SA704E, 2SA705., 2SA706., 2SA707., 2SA708., 2SA734D, 2SA734E, 2SA735., 2SA736., 2SA737., 2SA738., 2SA755., 2SA756., 2SA756., 2SA757., 2SA758., 2SA786., 2SA786., 2SA786., 2SA787., 2SA788 |



| rder No. | odd feeture Description | |
|---|--|------------|
| 6V7004 | Electronics unit | |
| SY7001 - - | Electronics unit | List price |
| 0 | for 2S.70 and 2S.50 | |
| 3 | for 2S.73 (actuator-neutral can also be used for 2S.70) | |
| 5 | for 2S.75 and 2S.55 (actuator-neutral can also be used for 2S.73 and 2S.70) for 2S.78 and 2S.58 (actuator-neutral can also be used for 2S.75, 2S.73 and 2S.70) | |
| • | (astation motival carried be added for 20.70; 20.70 and 20.70) | |
| | Determination 2007 | add. cost |
| C A | Rotary actuators 2SA7 Part-turn actuators 2SG7 1.25 – 10 rpm | without |
| В | 2.5 – 20 rpm | |
| *) < C | 5 – 40 rpm 80 – 10 sec/90° | |
| DE | 10 – 80 rpm 20 – 160 rpm | |
| P | actuator-neutral → requires "0" in 11 th and 12 th place of order No. | |
| | 4.40.440.447. | |
| B | 1x AC 110 – 115 V 1x AC 220 – 230 V | without |
| J | 3x AC 190 – 200 V | |
| S | 3x AC 380 – 460 V small electronics unit (motor up to 1.5 kW) | |
| T | big electronics unit (motor 3 or 5.5 kW) | |
| | Rotary actuators 2SA7 Part-turn actuators 2SG7 | |
| 0 | actuator-neutral resp. 2SG7.0. | without |
| 1 | 2SA7.1. 2SG7.1. | |
| 3 | | |
| *) < \frac{3}{4} | 2SA7.4. | |
| 5 | 2SA7.5. | |
| 6 7 | 2SA7.6. | |
| 8 | 2SA7.8. | |
| | | |
| *) $\left\langle \begin{array}{c c} 0 \\ 3 \end{array} \right $ | actuator-neutral resp. for rotary actuator 2SA7 | without |
| , 3 | for small part-turn actuator 2SG7 | |
| 3 | ECOTRON | without |
| 4 | PROFITRON/HiMod | |
| Ä | without add-ons for electronics unit | without |
| В | relay board with 5 (ECOTRON) / 8 (PROFITRON/HiMod) outputs ¹⁾ | |
| C | PROFIBUS DP - 1-channel | |
| D E | PROFIBUS DP - 2-channel MODBUS RTU - 1-channel | |
| F | MODBUS RTU - 2-channel | |
| G | PROFIBUS DP - 1-channel, Micromaster compatible | |
| H | PROFIBUS DP - 2-channel, Micromaster compatible | |
| J | HART (only PROFITRON/HiMod) ¹⁾ | |
| K | HART + relay board (only PROFITRON/HiMod) ¹⁾ | |
| Ä | standard software-function | without |
| В | Positioner for 2SA73 and 2SA75 (only PROFITRON) | |
| C | for 2SA78 Process controller for 2SA75 (only PROFITRON) | without |
| 6 | for 2SA78 | |
| D | travel dependent output speed adjustment (only PROFITRON) | |
| E | Positioner + for 2SA73 and 2SA75 (only PROFITRON) | |
| F | travel dependent output speed adjustment for 2SA78 external analog output speed setpoint (only PROFITRON) | |
| G | Positioner + for 2SA73 and 2SA75 (only PROFITRON) | |
| | external analog output speed setpoint for 2SA78 | |
| Н | Positioner with split-range functionality for 2SA73 and 2SA75 (only PROFITRON) | |
| J | for 2SA78 travel dependent freely adjustable positioning times (only PROFITRON) | |
| <u> </u> | Positioner + for 2SA73 and 2SA75 (only PROFITRON) | |
| | travel dependent freely adjustable positioning times for 2SA78 | |
| L | Process controller + for 2SA75 (only PROFITRON | |
| | travel dependent freely adjustable positioning times for 2SA78 | |
| 4 | for round plug / field bus interface | without |
| 8 | with connection hood / / field bus connection ²) | |

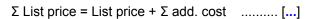
¹⁾ No compatibility with SIPOS $5 \Rightarrow$ new wiring required at the customer connection and possibly for the control system!

²⁾ Required for replacement for SIPOS 5 with direct connection, terminal box or compact plug and for version with relay board or HART interface!

Differentiation only necessary if the data is not downloaded from the old unit with the PC parameterization program COM-SIPOS (Order No. **2SX7100-3PC02**) and is uploaded into the replacement electronics. Actuator-neutral electronics unit: 2SY7001-.**P.00**-....!

Additional features for **electronics unit** 2SY7001-... (add. "-Z" to order No.)

| | add. features | | add. cost |
|--|---------------|---|------------|
| ECOTRON | M 1 8 | Automatic motor stop period heater | |
| PROFITRON/HiMod | M 1 8 | Automatic motor stop period heater | without |
| Setting/programming | V 5 0 | Test to IEC 61800-2 | |
| | Y 0 5 | Torque dependent cut-off in end position: | without |
| | Y 1 1 | Parameterization to customer requirement → specify serial number! | |
| | Y 3 3 | Binary and analog inputs freely usable via fieldbus | without |
| | Υ | Project dependent parameterization: Y12, Y14, Y15, Y17, Y19, Y50, Y90 | |
| | Y 9 9 | Customer specific software-programming | on request |
| Customer plate | B 0 0 | With freely definable text | |
| Language for rating plate and wiring diagram | В | Rating-plate foreign-language/English, wiring diagram foreign-language: AR (B65), CS (B55), DA (B62), EL (B60), EN (B49), ES (B51), FI (B54), FR (B50), IT (B52), PL (B57), PT (B64), RO (B59), RU (B53), SK (B61), SV (B56), TR (B63), ZH (B58) | without |
| Other | B 9 9 | Chinese project | |
| | C 6 3 | Binary inputs OPEN/CLOSE for 120 V AC (internal power supply) | |
| | C 6 7 | Analog position feedback externally powered with 24 V DC | on request |
| | C 7 0 | Analog input 2 and output 2 for voltage signals 0/15 V, 0/210 V | on request |
| | K 5 1 | Protection class IP68-8 | |
| | P 1 5 | Connection with PG-threads (only relevant for version with connection "8") | without |
| | P 1 8 | Connection with NPT- threads (only relevant for version with connection "8") | |
| | P 2 5 | Connection with Whitworth- threads (only relevant for version with connection "8") | |
| | S 6 3 | Glass display window | |
| | T 0 6 | Temperature range -30 °C to +60 °C | without |
| | V 6 0 | AUMA front label | |
| special wiring diagram (only applicable for the electrical connection) | C | project dependent wiring diagram: C15, C16, C23 | |
| Finish paint | L 3 0 | Unpainted | |
| | L 3 2 | Double thick-film paint 150 μm (instead of 80 μm) | |
| | L 3 8 | Very high corrosion protection, corrosivity category C5 with long protection time | |
| | Y 3 5 | Top coat of paint for colors other than RAL7037: → specify required color! | |





Electronics unit

| Order No. | add. features | | Description | List price |
|-----------|---------------|-----------|--|------------|
| 2SY7041 - | | | s housing cover 1) ating (similar RAL7037), complete with turning push knob, label, bunting parts) | |
| 3 M C | 0 1 | ECOTRON | small electronics unit (motor up to 1.5 kW) | |
| 3 M C | 3 4 | | big electronics unit (motor from 3 kW) | |
| 4 M C | 0 1 | PROFITRON | small electronics unit (motor up to 1.5 kW) | |
| 4 M C | 3 4 | | big electronics unit (motor from 3 kW) | |
| 8 M C | 0 1 | HiMod | small electronics unit (motor up to 1.5 kW) | |
| 8 M C | 3 4 | | big electronics unit (motor from 3 kW) | |

Additional features (add. "-Z" to order No.)

| | add. features | | add. cost |
|--------------|---------------|---|-----------|
| Display | S 6 3 | Glass display window | |
| Label | V 6 0 | AUMA front label | without |
| Finish paint | L 3 2 | Double thick-film paint 150 μm (instead of 80 μm) | |
| | L 3 8 | Very high corrosion protection, corrosivity category C5 with long protection time | |
| | Y 3 5 | Top coat of paint for colors other than RAL7037: → specify required color! | |

 Σ List price = List price + Σ add. cost[...]

| Mechanical operation lock of the drive controller (turning push knob), lockable | Order No.: 2SX7302-0BS00 | |
|---|--------------------------|--|
| Padlock | Order No.: 2SX7302-0VS00 | |



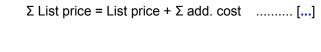
Electronics housing cover

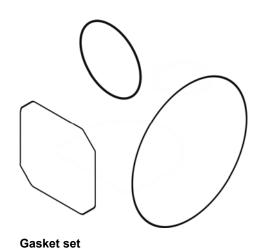
| 1) | Version | Actuator types |
|----|---------|--|
| | | 2SA701., 2SA702., 2SA703., 2SA704C, 2SA731., 2SA732., 2SA733., 2SA734C, 2SA752., 2SA752., 2SA753., 2SA753., 2SA754C, 2SA784C, |
| | | 2SA704D, 2SA704E, 2SA705., 2SA706., 2SA707., 2SA708., 2SA734D, 2SA734E, 2SA735., 2SA736., 2SA737., 2SA738., 2SA754D, 2SA755., 2SA756., 2SA756., 2SA757., 2SA758, 2SA788 |

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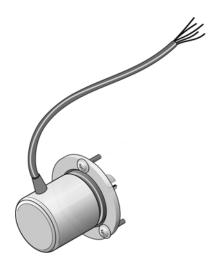
Mechanical

| Order No. | | Description | List price |
|-------------------|-------------------|---|------------|
| 2SY7218 - DS 1 | 0 | Gasket set for commissioning (O-rings) | |
| 0 | | Recommended gasket set for commissioning for 2S.7- actuators (O-rings for electronics housing cover, signaling gear hood and connection cover/hood) | |
| Additiona | al features (add. | "-Z" to order No.) | |
| | add. features | | add. cost |
| Ambient condition | T 0 9 | Temperature range -20 °C to +90 °C for gear unit | on request |



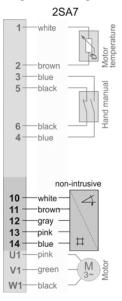


Definition of spare parts Order No. Description Indicates the process of the process of the part of



non-intrusive position encoder

Assignment overview - Part 036 Plug element for gear unit connection



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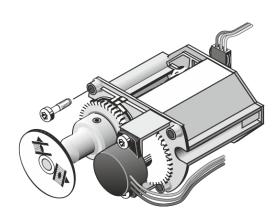
¹⁾ The pressing-out tool 2SX7501-0CD02 is needed to release the contacts pins in part 036!

| Order No. add. feat | rures | Description | List price |
|---------------------|-----------------------|---|------------|
| 2SY7220 - MG | (complete mounted and | Signaling gear (complete mounted and adjusted, with potentiometer, standstill detection and wiring harness) | |
| $\frac{0}{0}$ 02 | for 2SA70 | without mechanical position indicator | |
| 0 03 | for 00 470 and 00 475 | with mechanical position indicator | |
| $\frac{5}{5}$ 0.3 | for 2SA73 and 2SA75 | without mechanical position indicator with mechanical position indicator | |

Additional features (add. "-Z" to order No.)

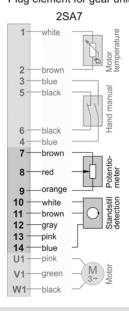
| | add. features | | add. cost |
|--------------------|---------------|---------------------------------------|-----------|
| > 4020 revs/stroke | P 3 4 | Signaling gear for > 4020 revs/stroke | |

 Σ List price = List price + Σ add. cost[...]



Signaling gear

Assignment overview - Part 036 Plug element for gear unit connection



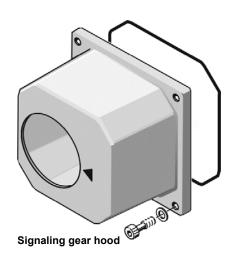
 $\textbf{1)} \quad \text{The pressing-out tool } \textbf{2SX7501-0CD02} \text{ is needed to release the contacts pins in part } \textbf{036!}$

2) Secure screws with Loctite 222!

Definition of spare parts Order No. Description List price add. features 2SY7225 -0 0 Signaling gear hood (complete with O-ring and mounting parts) for 2SA70, 2SA73 and 2SA75 0 M D for signaling gear 0 M N for "non-intrusive" Additional features (add. "-Z" to order No.) add. cost add. features Temperature range -20 °C to +90 °C for gear unit Ambient condition T 0 9 on request Finish paint L 3 4 Painting signaling gear hood

Top coat of paint for colors other than RAL7037: → specify required color!

 Σ List price = List price + Σ add. cost[...]



Y3 5

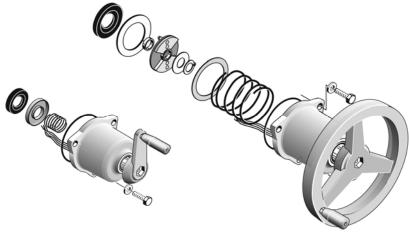
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| Order No. | add. features | | Description | | List price |
|-----------|---------------|------------------|---|------------------|------------|
| 2SY7250 | | | similar RAL7037), depending on the ession spring, connecting cable, Count mounting parts) | | |
| 1 H U 1 0 | | for 2SA70, 2SA73 | Hand manual gear size 12) | with crank 60 mm | |
| 3 H U 1 0 | | and 2SA75 | Hand manual gear size 32) | with crank 90 mm | |
| 1 H M 1 0 | | for 2SA78 | Hand manual gear size 12) | with hand wheel | |
| 3 H M 1 0 | | | Hand manual gear size 32) | | |
| 4 H U 1 0 | | for 2SA7 | Hand manual gear size 42) | | |
| 6 H U 0 0 | | for 2SG7 | Hand wheel, complete | | |

Additional features (add. "-Z" to order No.)

| | add. features | | add. cost |
|-----------------------|---------------|--|------------|
| Chain wheel drive | V 0 0 | for gear size 1 ²) | |
| | | gear size 3 ²) | |
| | | 2SG7 | |
| Hand wheel | V 2 5 | Hand wheel instead of hand crank | |
| Direction of rotation | V 2 7 | Direction of ratation not indicated on the actuator | |
| | V 2 8 | Direction of rotation reference at the hand wheel/crank in counter-clockwise direction | |
| Ambient condition | K 5 1 | Protection class IP68-8 gear size 1 ²⁾ | |
| | | gear size 3 ²⁾ | |
| | | gear size 4 ²) | |
| | T 0 9 | Temperature range -20 °C to +90 °C for gear unit | on request |
| Finish paint | L 3 2 | Double thick-film paint 150 μm (instead of 80 μm) | |
| • | L 3 8 | Very high corrosion protection, corrosivity category C5 with long protection time | |
| | Y 3 5 | Top coat of paint for colors other than RAL7037: → specify required color! | |

 Σ List price = List price + Σ add. cost [...]



Plug element for gear unit connection 2SA7

Assignment overview - Part 036

| | 2S | A7 | | | |
|------|---------|-----|----------------------|---|---------------|
| 2- | -white | , 0 | Motor temperature | | |
| 3- | -blue | | a | | |
| 5- | —black | 7/ | Hand manual | | |
| 6- | -black | — | Ĭ | | |
| 4- | -blue | | | | |
| 7- | -brown | | 4 | ÷ | |
| 8- | -red | - | Potentio- meter | | |
| 9- | —orange | | | ÷ | non-intrusive |
| 10 - | -white | | still | ÷ | 1 |
| 11 - | -brown | -0 | nd | ÷ | -\ \ ' |
| 12 - | -gray | | Standstill detection | ÷ | - \ |
| 13 - | -pink | | | | _ \ |
| 14 | -blue | | | ÷ | _ # \ |
| U1- | —pink | _ | | | |
| V1- | -green | - M | Motor | | |
| W1- | -black | | _ | | |

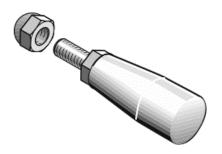
1) The pressing-out tool **2SX7501-0CD02** is needed to release the contacts pins in part 036!

Hand manual

| , | , ., 3 | | | | | | |
|----|------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|--|
| 2) | Rotary actuators | ON-OFF | Inching/ Positioning | Modulating | Continuous modulating | | |
| | Gear size 1 | 2SA701 2SA702 | 2SA731 2SA732 | 2SA751 2SA752 | 2SA781 2SA782 | | |
| | Gear size 3 | 2SA703 2SA704 | 2SA733 2SA734 | 2SA753 2SA754 | 2SA783 2SA784 | | |
| | Gear size 4 | 2SA705 2SA706 2SA707 2SA708 | 2SA735 2SA736 2SA737 2SA738 | 2SA755 2SA756 2SA757 2SA758 | 2SA785 2SA786 2SA787 2SA788 | | |

| Definition of | spare parts | | | | |
|---------------|----------------|---------------|-------------------------------|---|------------|
| Order No. | | add. features | | Description | List price |
| 2SY7252 - | | | Handle ¹⁾ | | |
| | | | | | |
| | 1 G M 0 6 | | for 2SA70, 2SA73 and 2SA75 | Handle gear size 1 ²⁾ and 3 ²⁾ for hand crank | |
| | 1 G M 1 1 | | for 2SA7 | Handle gear size 42) for hand wheel | |
| | 6 G M 0 0 | | for 2SG7 | Handle for hand wheel | |
| | Additional fea | itures (add. | "-Z" to order No.) | | |
| | | add. features | | | add. cost |
| Hand whee | el | V 2 5 | for hand wheel instea | ad of hand crank | |

 Σ List price = List price + Σ add. cost[...]



Handle

| 2) Secure screw with Loctite 243! | | | | | | |
|-----------------------------------|------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|
| 2) | Rotary actuators | ON-OFF | Inching/ Positioning | Modulating | Continuous modulating | |
| | Gear size 1 | 2SA701 2SA702 | 2SA731 2SA732 | 2SA751 2SA752 | 2SA781 2SA782 | |
| | Gear size 3 | 2SA703 2SA704 | 2SA733 2SA734 | 2SA753 2SA754 | 2SA783 2SA784 | |
| | Gear size 4 | 2SA705 2SA706 2SA707 2SA708 | 2SA735 2SA736 2SA737 2SA738 | 2SA755 2SA756 2SA757 2SA758 | 2SA785 2SA786 2SA787 2SA788 | |

Page 12 Y070.334/EN **COM-SIPOS**

[...]

Accessories

Order No. Description List price

2SX7100 - 3 P C 0 2

PC parameterization program

(for commissioning, programming, diagnosis, maintenance and visualization)



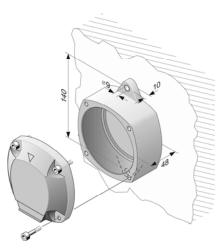
USB stick COM-SIPOS

Scope of supply

- PC parameterization program
- User manual DE and EN/US (on USB stick)
- USB cables type A/A and A/B for connection to the USB port of the laptop

 Order No.
 Description
 List price

 2SX7303 - 0 P S 0 1
 Parking socket (for round plug connection, silver-gray coating (similar RAL7037))
 [...]

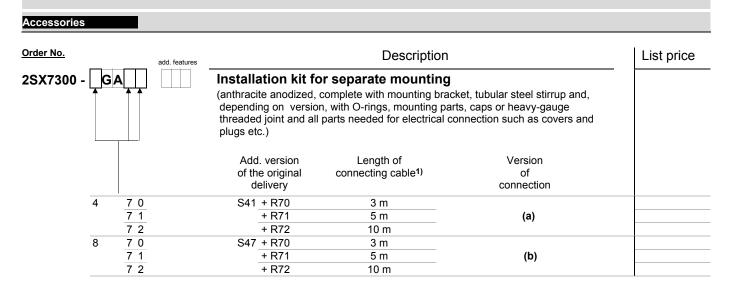


Parking socket

Scope of supply

- Parking socket
- Cover with screws





(a) Fixed cable connection

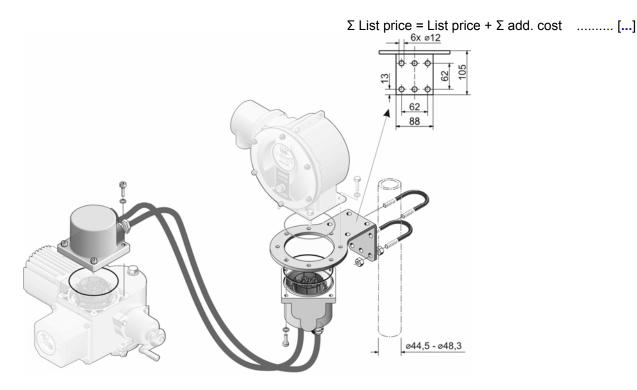
Connecting cable with connection plug hoods (electronics unit and gear unit) completely assembled. Cable ends ready for plugging in.

(b) Fixed cable connection for variable lengths

Connecting cable with connection plug hood (electronics unit) and with free ends towards the gear unit, completely assembled. The cable ends to the connection plug hood on the gear unit side must be connected locally after individual cutting to length and in accordance with the included connection diagram. Cable ends ready for plugging in.

Additional features (add. "-Z" to order No.)

| | add. features | | add. cost |
|-------------------|---------------|---|------------|
| Ambient condition | K 5 1 | Protection class IP68-8 | |
| | T 0 9 | Temperature range -20 °C to +90 °C for gear unit | on request |
| Finish paint | L 3 2 | Silver-gray coating (similar RAL7037) | |
| | L 3 8 | Very high corrosion protection, corrosivity category C5 with long protection time | |

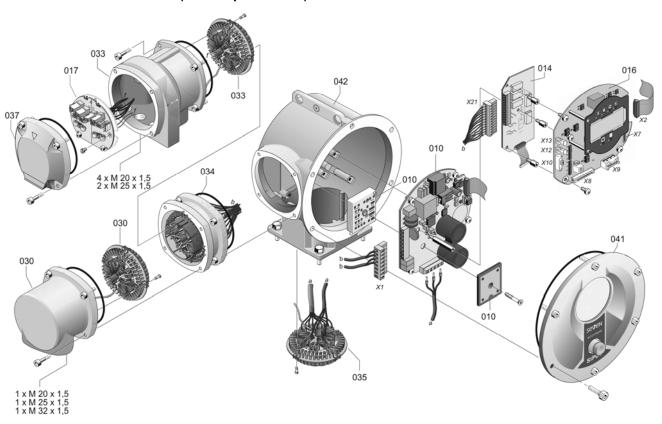


Separate mounting, version shown 2SX7300-4GA...

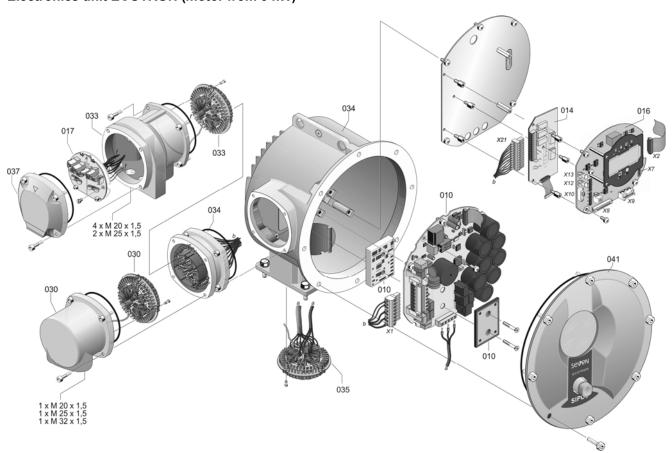
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¹⁾ Other versions with cable lengths up to 150 m on request!

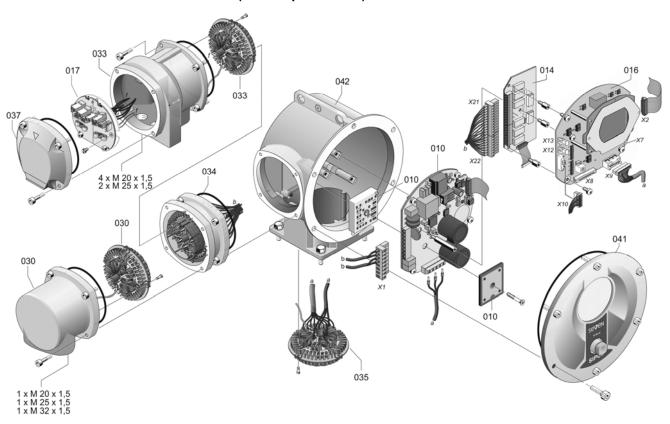
Electronics unit ECOTRON (motor up to 1.5 kW)



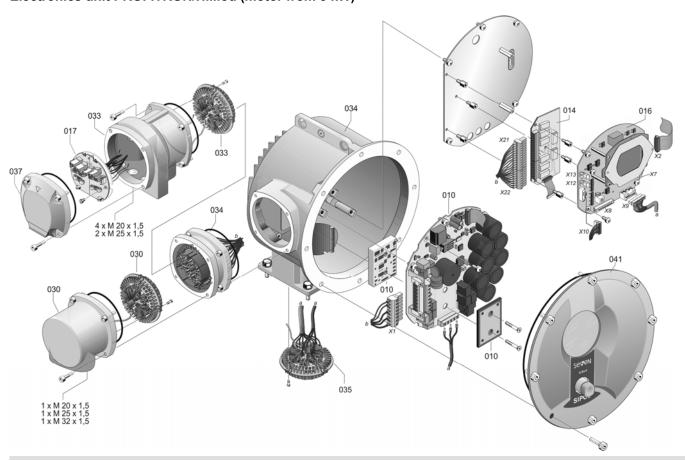
Electronics unit ECOTRON (motor from 3 kW)

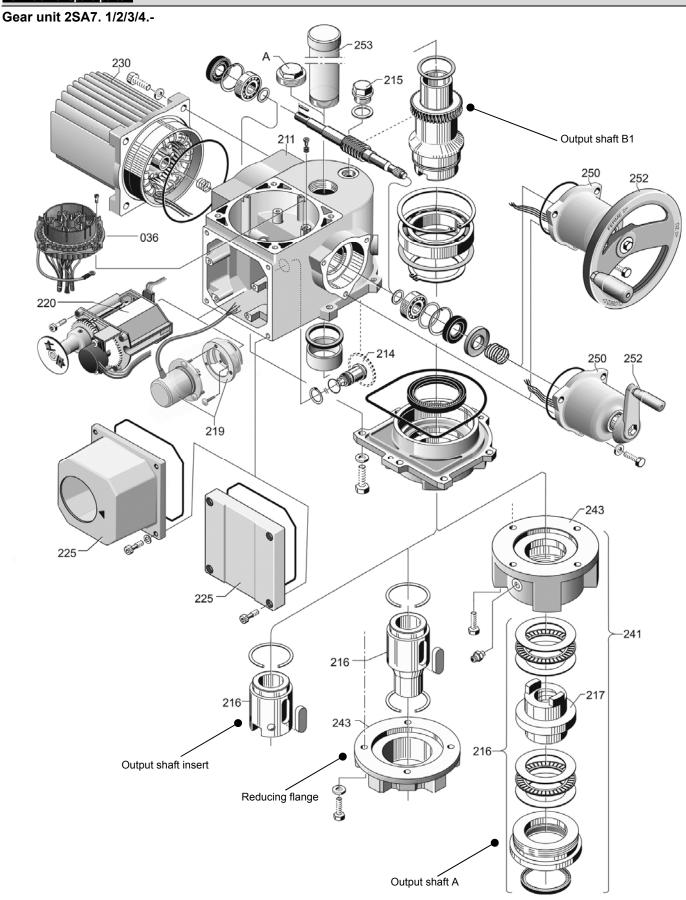


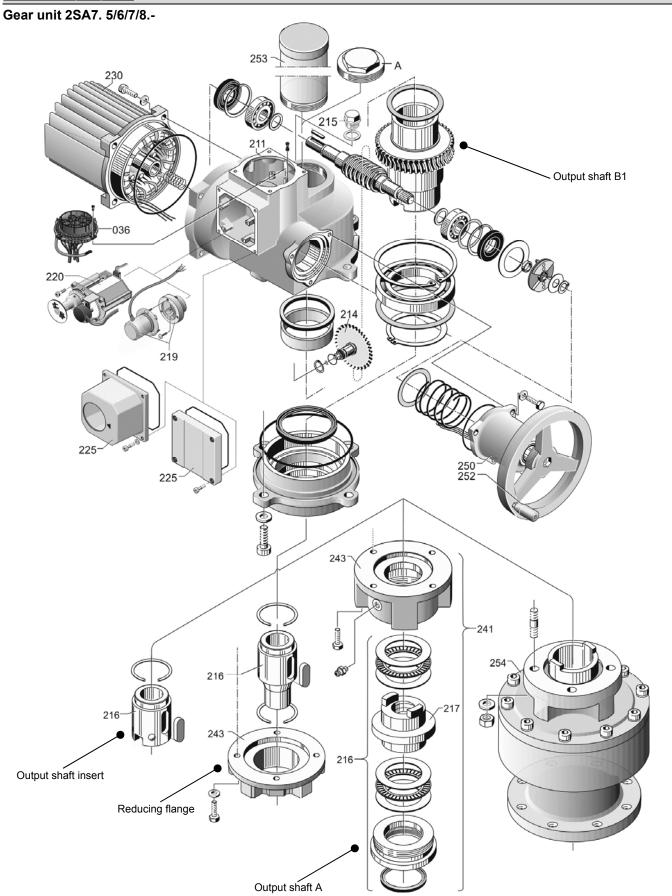
Electronics unit PROFITRON/HiMod (motor up to 1.5 kW)

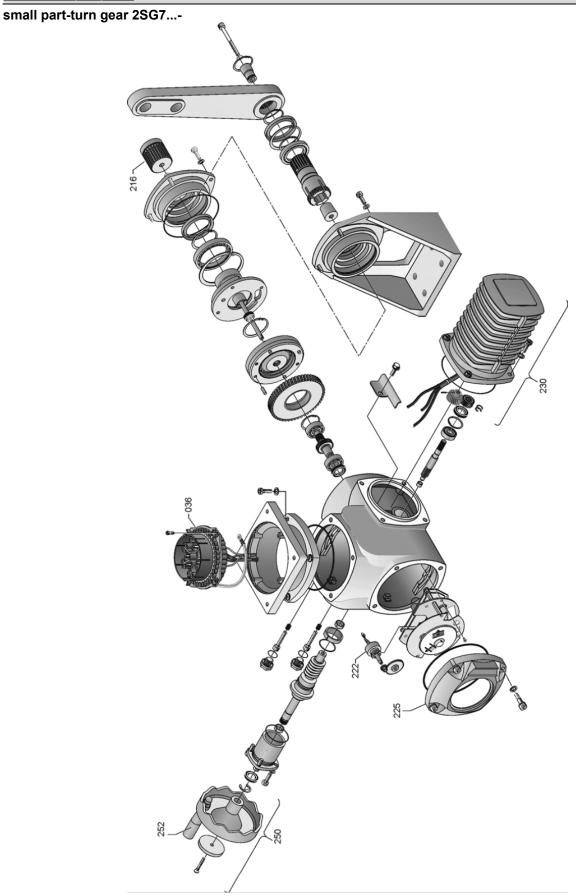


Electronics unit PROFITRON/HiMod (motor from 3 kW)









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